

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An electrode composition containing a lithium fluoroborate-based salt in an electrolyte, wherein:

a poly(vinylidene fluoride) homopolymer is contained at least as a binder and a lactone is contained as an electrolyte solvent,
said poly(vinylidene fluoride) homopolymer being obtained by [[a]] an emulsion polymerization process.

Claim 2 (Original): The electrode composition according to claim 1, wherein said poly(vinylidene fluoride) homopolymer has a molecular weight of 50,000 or higher and a degree of crystallinity of 30% or greater, and

a solvent for an electrolyte solution further contains a cyclic carbonate provided that the volume ratio of said cyclic carbonate and said lactone is in the range of 3/7 to 1/9 as calculated on an ethylene carbonate-to- γ -butyrolactone basis.

Claim 3 (Currently Amended): A lithium secondary battery, which comprises an electrode composition as recited in claim 1 ~~or 2~~.

Claim 4 (Original): The lithium secondary battery according to claim 3, wherein at least the poly(vinylidene fluoride) homopolymer, lactone and lithium fluoroborate-based salt are contained as solid electrolyte components.

Claim 5 (Currently Amended): The lithium secondary battery according to claim 3 ~~or 4~~, wherein a lithium-containing composite oxide comprising lithium cobalt oxide and a

subordinate component element M, where M is a transition or typical metal element exclusive of Li and Co, in an amount of 0.001 to 2 at% relative to cobalt in the lithium cobalt oxide is contained as a cathode active substance, and 60 to 95% by volume of γ -butyrolactone is contained as an electrolyte solvent.

Claim 6 (Original): The lithium secondary battery according to claim 5, wherein said subordinate component element is one or two or more of Ti, Nb, Sn and Mg.

Claim 7 (Original): A lithium secondary battery, wherein:
a cathode, an anode and an electrolyte are encased in a housing,
a lithium-containing composite oxide comprising lithium cobalt oxide and a subordinate component element M, where M is a transition or typical metal element exclusive of Li and Co, in an amount of 0.001 to 2 at% relative to cobalt in the lithium cobalt oxide is contained as a cathode active substance,
60 to 95% by volume of γ -butyrolactone is contained as an electrolyte solvent, and
said housing has a thickness of 0.3 mm or smaller.

Claim 8 (Original): The lithium secondary battery according to claim 7, wherein said subordinate component element is one or two or more of Ti, Nb, Sn and Mg.

Claim 9 (New): The lithium secondary battery according to claim 10, wherein at least the poly(vinylidene fluoride) homopolymer, lactone and lithium fluoroborate-based salt are contained as solid electrolyte components.

Claim 10 (New): The lithium secondary battery according to claim 2, wherein a lithium-containing composite oxide comprising lithium cobalt oxide and a subordinate component element M, where M is a transition or typical metal element exclusive of Li and Co, in an amount of 0.001 to 2 at% relative to cobalt in the lithium cobalt oxide is contained as a cathode active substance, and 60 to 95% by volume of γ -butyrolactone is contained as an electrolyte solvent.

Claim 11 (New): The lithium secondary battery according to claim 4, wherein a lithium-containing composite oxide comprising lithium cobalt oxide and a subordinate component element M, where M is a transition or typical metal element exclusive of Li and Co, in an amount of 0.001 to 2 at% relative to cobalt in the lithium cobalt oxide is contained as a cathode active substance, and 60 to 95% by volume of γ -butyrolactone is contained as an electrolyte solvent.

Claim 12 (New): The lithium secondary battery according to claim 11, wherein said subordinate component element is one or two or more of Ti, Nb, Sn and Mg.

Claim 13 (New): The lithium secondary battery according to claim 10, wherein said subordinate component element is one or two or more of Ti, Nb, Sn and Mg.

Claim 14 (New): The lithium secondary battery according to claim 7, wherein the housing has a thickness of 0.15 mm or smaller.

Claim 15 (New): The lithium secondary battery according to claim 8, wherein the housing has a thickness of 0.15 mm or smaller.

Claim 16 (New): The lithium secondary battery according to Claim 7, wherein said subordinate component element is one or two or more of Ti, Nb and Mg.